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‘If truth was a woman’: Leaky infrastructures and the gender politics of truth-telling

Daniela Agostinho and Nanna Bonde Thylstrup

abstract

The parrhesiastic spaces brought about by networked technologies have transformed what counts as truth-telling today. While the notion of truth has been thoroughly scrutinized within organization theory as well in studies on the ethics of whistle-blowing, less attention has been devoted to how new and emerging practices of truth-telling are related to socio-technological imaginaries – that is, the way social structures such as gender, sexuality and race affect and are affected by technological assemblages, especially infrastructures of information. This article argues that networked forms of truth-telling are enmeshed in technological imaginaries where gender and sexuality are symbolically and materially encoded. Prompted by recent cases of information disclosure, the article theorizes how technological infrastructures, gendered imaginaries and economic regimes come together to shape, complicate and ultimately define who counts as a truth-teller within parrhesiastic networked spaces. Drawing on feminist infrastructure and media theories, the article discusses normative distinctions between whistle-blowers, leakers and hackers to explore how their infrastructural imaginaries map onto contemporary communication networks, the gender politics of organizing information, and the conditions of what counts as truth. The article argues that attending to infrastructural imaginaries and their intersections with gendered imaginaries can not only help us to make sense of how the gendering of truth-telling operates in highly networked spaces, but can also aid us in devising improved conditions for truths to be told in organizational spaces. Ultimately, infrastructures matter because they fundamentally determine whose knowledge and labour are socially valued, and whose voices come to count in public life.

Introduction: Supposing that truth is a woman...

‘Supposing that Truth is a woman – what then?’ So begins Nietzsche’s (2009) preface to *Beyond good and evil*, where the philosopher equates the elusiveness of

truth with that of women. While Nietzsche's disdain for (and awe at) both truth and women has been consistently noted (see for instance Oliver, 1984), contemporary practices of truth-telling surprisingly suggest that he might have been on to something. What has been termed 'networked parrhesia', understood as a radical transformation of the process of 'speaking truth to power' enabled by networked technologies (Munro, 2017), seems to be enmeshed in technological and infrastructural imaginaries where gender is both symbolically and materially encoded. Extensive research within organization studies has drawn attention to the gendered dimension of organizations and labour, focusing on the gendered imaginaries on which organizations are premised, the gendered subjectivities they create and recreate, and how gender is both negotiated and undone in organizational settings (Britton, 2000; Gherardi and Poggio, 2001; Poggio, 2006; Pullen and Knight 2007; Kelan, 2010; Harding et al., 2013). At the same time, recent scholarship has addressed how the practice of truth-telling is problematically gendered, in particular in its relation to power (Maxwell, 2015). Significantly, Lida Maxwell has recently argued, in her reading of Foucault's lectures on parrhesia, that in order to speak truth to power, one has to appear distant from power so as to guarantee one's credibility, but also to be invested with some degree of political power so as to render one's truth significant (Maxwell, 2018). This predicament is already heavily gendered, given that distance from and proximity to power (and the ability to negotiate between the two positions) are situated in what Joan Acker refers to as organizational 'inequality regimes', where class, gender and racial inequalities persist in organizations as systemic disparities, even as institutions struggle to appear neutral and rational (Acker, 2006: 443ff.).

While these fields of research help us make sense of the gendered dimension of truth-telling within organizations, they have thus far not engaged with how new and emerging practices of truth-telling are related to socio-technological imaginaries, that is, the way social structures such as gender, sexuality, class and race affect and are entangled in technological assemblages, especially infrastructures of information. Attending to the entanglements of gender, information infrastructures and truth-telling is crucial, we suggest, because it not only allows us to attune to why and how whistles are blown, but also to critically examine who is afforded the role of whistle-blower and how much weight their words are given within highly networked contexts.

Whistle-blowers often trigger the relatively familiar imaginary of a 'conscientious individual's lonely struggle for justice, pitted against forces with infinitely more power and resource', even though the whistle-blower remains a figure 'surrounded by legal, moral, and political uncertainty' (Contu, 2014: 393). Recent literature has sought to offer new perspectives on whistle-blowing that nuance

and challenge the familiar tropes we have come to know through popular culture and news reporting. Such new perspectives help us remember that the whistle-blower is not 'a pre-existing entity', as Kate Kenny et al. note, but rather a moral construction that 'emerges as an ethical subject through the practice of speaking out' (Kenny et al., 2018: 1744). Alessia Contu's work on the unsettling figure of the whistle-blower, for instance, is inspiring in this regard. She explores not only the subjectivity of whistle-blowers and their rationality, but also 'their relationality... the relational process of what they engender in the subjects who hear the whistle' (Contu, 2014: 394). Paraphrasing Wendy Brown's famous reading of *Antigone*, Contu notes:

what matters about whistleblowers [is] not that we should respond to them in a particular way but that they compel such serious attention, forcing us, as we respond, to confront some of our most fundamental ethical assumptions. You may love whistleblowers or hate them, what no thinking person has ever managed to do is to ignore them. (*ibid.*: 403)

We would like to challenge this idea that no thinking person has ever managed to ignore whistle-blowers. This article argues that such an assumption is symptomatic of a general lack of theoretical discussion of the significance of gender in the relational practice of whistle-blowing. Attention to gender shows that certain whistle-blowers indeed can be, and have been, ignored, overlooked and dismissed. As Kenny (2018) points out, gender remains a question crucial to whistle-blowing; and as this article suggests, gender matters not only to imaginaries of whistle-blowers (who is afforded this subjectivity, and who is not), but also to the networked communicative infrastructures through which truths are told. A recent interview with Sarah Harrison – a former activist for the whistle-blowing website WikiLeaks who now works with the Courage Foundation, an organization to support whistle-blowers and hacktivists who are being persecuted – provides us with a striking example of such imaginaries of whistle-blowers and the subjectivities they deny. Harrison was a high-ranking member of WikiLeaks' permanent staff, and she worked on the National Security Agency (NSA) scandal and the 'Afghan war diary'. She was also central in getting Snowden to Russia. Yet, in the media she would often be described not as a whistle-blower but as Snowden's friend or assistant. She notes:

The ones where it really annoyed me was where it was by journalists I had worked with! We'd had meetings talking about stories! I was described as a 'companion', very good at washing socks and making phone calls. These sorts of things. Sadly we get used to that as women. We shouldn't but we do. At that time there was a desire to sensationalise the story in the press and make it more James Bond-like, planes going down and an international fugitive. A 'pretty blonde assistant' seemed to fit with those stories, not a hardworking journalist looking at politics and law to sort the situation out. (Abraham, 2018)

The Harrison example resonates with Kenny's theoretical work. Drawing on Butler, Kenny notes that organizations still operate within a heterosexual matrix that not only inscribes normative gendered and sexual identities, but also limits 'the kinds of subjectivities available to individuals' (Kenny, 2018: 1028). Indeed, these matrices 'operate in organizations via mechanisms that deny recognition to certain subjects', and thus also work to foreclose certain subjectivities (*ibid.*: 1042). Her empirical studies highlight how certain kinds of speech are 'governed by subtle matrices of control', with the effect that 'a boundary [is] set up delineating "impossible" subjects from valid ones' (*ibid.*: 1027). What Kenny draws attention to, and what we wish to emphasize and further nuance, is that such normative matrices work to disregard some whistle-blowers and even make them impossible, framing them instead as other, socially devalued subjectivities, such as 'assistants', 'companions', or even 'lovers' or 'looneys'. Such subjectivities, as we shall argue, often presuppose infrastructural imaginaries that assume and reinstate a heterosexual matrix, i.e. a 'grid of cultural intelligibility through which bodies, genders, and desires are naturalized' (Butler, 2002: 194n6). This grid, which we could term a heteropatriarchal matrix, determines that practices of whistle-blowing that do not adhere to heteropatriarchal norms, as well as those who speak outside those norms, are feminized and thus devalued and given lower credibility status. The construction of the ethical subject of the whistle-blower not only relies on the practice of speaking out, then, but also intersects with controlled subject positions, including gendered imaginaries regarding who does the speaking, through which networks and to what effect. As Silvia Gherardi puts it, '[g]ender has to do not only with bodies, and power, but also with the politics of knowledge, and therefore with organizations as containers of different bodies and sexualities, as arenas of power/knowledge' (Gherardi, 2005: 211).

The socio-technological imaginaries of parrhesia, and how they condition truth-telling bodies, are particularly evident in normative distinctions between whistle-blowers, leakers and hackers. As this article explores, these distinctions demarcate truth-telling bodies through a politically inflected field in which who counts as a truth-teller is defined according to gendered, sexualized, classed and raced norms of behaviour that influence the public assessment of and response to the truth-teller's speech (Maxwell, 2015). One prominent example is Chelsea Manning, the former United States Army soldier who released the Iraq and Afghan war logs to WikiLeaks, revealing human rights abuses and corruption connected to the US wars in Iraq and Afghanistan. She was convicted and sentenced to thirty-five years in a military prison, but was released in 2017 when President Obama commuted her sentence. While in prison, Manning publicly identified as a trans woman. Manning was often classified in public discourse as a would-be whistle-blower whose confusion over her gender identity kept her

from being perceived as a proper truth-teller (*ibid*). Another example is the overlooked case of Reality Winner, the former American intelligence specialist who was arrested in 2017 and charged with releasing classified information from the NSA to the whistle-blowing website The Intercept. Winner's behaviour has been repeatedly gendered, sexualized and infantilized to unsettle – and discredit – her disclosure of Russian attempts to interfere with the 2016 US presidential election. An in-depth profile of Winner published in *New York Magazine*, for example, whose body text details her exemplary school record among other admirable feats, bears the belittling title 'The world's biggest terrorist has a Pikachu bedspread' (Howley, 2017), while an article published in *Politico* emphasizes that she 'stuffed NSA report in her pantyhose' (Gerstein, 2017). Even more recently, the 2018 information scandal concerning Cambridge Analytica's misuse of Facebook profiles, disclosed by former Cambridge Analytica analyst Christopher Wylie – who presents himself as a gay and vegan whistle-blower – ultimately shows how a queer counterculture of hacking has been incorporated by platform capitalism, complicating the binary social imaginaries invested in technological practices of truth-telling.

While the politics of each example are unique and play out their own logics, we argue that they also share a common trait: they show how socio-technological infrastructural imaginaries of networks, gender and sexuality fundamentally shape, complicate and ultimately define who counts as a truth-teller within emerging parrhesiastic networked spaces. Drawing on feminist infrastructure and new media studies, this article wishes to advance the critical study of truth-telling, gender and sexuality in organizations. The article therefore asks: what are the normative distinctions between whistle-blowers, leakers and hackers, and how are these demarcations entangled in gendered and sexualized infrastructural imaginaries? Further, how do these imaginaries map onto contemporary communication networks, the gender politics of organizing information, and the conditions of what does and does not count as truth? In exploring these questions, the article argues that attending to infrastructural imaginaries and how their intersections with gendered and sexualized imaginaries of truth-telling can help us make sense of dominant and unnoticed social practices at play within organizations, and thus can advance the project of meaningful social and organizational change.

Infrastructural imaginaries of truth-telling

The infrastructures of information mediation are becoming increasingly decentralized and networked. As Pramod Nayar notes, these infrastructural transformations have given rise not only to a new digital culture but also to a new

parrhesiastic space (Nayar, 2010). This is of course because infrastructures in and of themselves act as ‘vehicles for professional and organizational transformation’ (Bowker et al., 1995: 345). New infrastructures fundamentally change both organizational practices and knowledge in relation to information mediation, and in doing so they also inscribe what we might call new information moral orders by allocating resources of information distribution, structuring informatic visibilities, and underpinning informational rhythms. Today’s infrastructures of information mediation should thus be seen not only as structuring new acts of truth-telling, but also as transforming the very nature of what it is to do – and what counts as – truth-telling.

In this process, it has become clear that the ethico-politics of truth-telling in contemporary networked societies rests not only on material infrastructural changes but also on attendant infrastructural imaginaries, that is, ‘ways of thinking about what infrastructures are, where they are located, who controls them, and what they do’ (Parks, 2015: 355). In order to understand how infrastructural imaginaries reshape the politics of truth-telling, it is necessary to analyse not only cables, packet switches and networks, but also the social structures that shape and are shaped by these imaginaries, as the critical study of infrastructures has pointed out.

The analysis of infrastructures is useful in this context because, as Paul Dourish and Genevieve Bell have suggested, they both are ‘embedded into social structures’ and ‘serve as structuring mechanism[s]’ in themselves (Dourish and Bell, 2007: 418). A sociopolitical reading of information infrastructures thus emphasizes the ways in which social forms are written into the technological scaffolding of information, and how they reflect and materialize power dynamics, thereby structuring the possibilities for social action.

The critical studies of infrastructures we draw on in this article rely on feminist scholars Susan Leigh Star and Karen Ruhleder’s understanding of infrastructure as a ‘fundamentally relational concept’ – a formulation that requires us to attend to infrastructures as socio-material processes and events, rather than physical objects (Star and Ruhleder, 1996: 113). In this understanding, infrastructures, rather than being viewed as inanimate objects, come to express what Lauren Berlant calls the ‘living mediation of what organizes life: the lifeworld of structure’ (Berlant, 2016: 393).

Central to critical studies of infrastructures is Susan Leigh Star’s notion of infrastructure as ‘an embedded strangeness, a second-order one, that of the forgotten, the background, the frozen in place’ (Star, 1999: 379). In her landmark article ‘The ethnography of infrastructure’ (1999), Star put forward a

definition of infrastructure that remains influential to this day: when infrastructure works as it should, it becomes invisible and unnoticed. This desired invisibility, as Ara Wilson (2016) points out, positions infrastructure as an ideological object. Like ideology, infrastructure operates at its best when invisible, unnoticed, taken for granted. As Wilson writes:

[A] component of successfully operating infrastructure is thus ideological, by operating in ways that obscure the labor and politics involved in that functioning. Just as ideology can become more obvious during fraught times or in off-kilter (heterotopic) spaces, then so too is consciousness of infrastructure more apparent when not yet absorbed into the background. (2016: 270)

Infrastructures are thus built and operated behind the scenes and out of sight, in order to attain the ideal status of seamless, unnoticed background, conditioning the context in which visible activities appear. A critical analysis of infrastructure, similarly to the critique of ideology, is therefore concerned with foregrounding that which is designed to stay in the background.

If their optimal functioning is equated with invisibility, infrastructures are easily associated with the kind of labour historically and culturally ascribed to women, racialized subjects and low-status workers: the invisible, voiceless, caring work of maintenance, performed in the back rooms of history (Mattern, 2018). Infrastructures thus tend to function like gender, a defining social category that structures the everyday life of organizations but often goes unnoticed. Organization studies have often drawn attention to how gender operates in subtle and imperceptible ways, and how organizational practices that are heavily gendered appear gender-neutral (Ely and Meyerson, 2000). As Pullen and Knight observe: 'Organizations are often characterized as scenes of constraint as well as opportunity, sites of incessant activity where gender often passes unnoticed, denied or disavowed partly because it is "done" routinely and repeatedly unknowingly and with a degree of automaticity that conceals its precariousness and performativity' (Pullen and Knight, 2007: 505). According to Harrison, the everyday of truth-telling is indeed comprised of infrastructural labour, more characterized by tedious and invisible routine operations than by spectacle:

We were sent large data sets of documents, and would have to check they were verified... there is a lot of work to go through, making calls researching stories in there, cross-referencing what you find in as many ways as possible... there's a feeling from the outside that it must all be secret and exciting but emails for example can be technically difficult to work with. Of course I loved the work we did, but when stories came in, I have to admit that a little bit of me would think 'Oh, now we've gotta go through this whole thing!' and I'd want to throw my computer out the window. (Abraham, 2018)

How might we understand Harrison's experience in relation to the overall issue of the gendered imaginaries of truth-telling? The tedious labour of truth-telling, essential as it is, rarely reaches public perception. Instead, public attention to truth-telling is reserved for the spectacle of the grand and masculinized gestures of speaking truth to power. What is exemplary about this case is that the backgrounded labour is not only performed by a woman but is also gendered as female: this kind of work is usually feminized and thus devalued (even when performed by a male subject) because it is associated with the menial work historically assigned to women. What is characteristic about Harrison's experience is not so much the fact that she performed boring infrastructural labour, but rather that she was never credited for truth-telling because this infrastructural labour was never recognized as truth-telling work. In fact, not only was she not credited for truth-telling; often, she was infantilized and sexualized for doing this kind of labour. As in previous histories of gendered sexualization, the organization of truth-telling also tells tales that both infantilize and sexualize those who perform the invisible infrastructural labour, to the extent that the subjectivity of women whistle-blowers is sexualized, diminished and even erased. One example is a recent – and deeply flawed – article in *Vogue* (unbearably referring to Harrison as a 'Snowdenista' in its title) that describes Harrison's reaction to her own depiction in the media:

There have been reports that while in England, Harrison did Assange's laundry and that, with her cheery demeanor and disarming laugh, she helped smooth over his often-prickly interactions with the press. When Harrison surfaced by Edward Snowden's side in Moscow, an Italian paper wondered aloud if she might be a twenty-first-century Mata Hari. 'I think, because there was such a void of information, the only way the press could speak about me was to identify me by the men I worked with,' she says lightly. 'And sometimes they did it in quite a snarky way.' (Corbett, 2015)

The depiction of Harrison in the media evokes a long history of how such meticulous and painstaking labour has been devalued by heteropatriarchal matrices of control in business and organizations (Davies 1982; Fine, 1990; Strom, 1992; Kwolek-Folland, 2010; Robertson, 2017). C. Fred Alford, who interviewed several men and women whistle-blowers, also pointed to the invisibilization of many truth-telling gestures that take place in contexts marked by gendered labour:

For every whistleblower who makes the front pages, a hundred never make the back pages. One whistleblower said that his father-in-law told him that if he had been a real whistleblower, he'd have been on *60 Minutes*. It's not true. The provision of medical services paid by Medicare is another area in which there is a lot of whistleblowing (likely because fraud is both easy and evidently common), and it is most often nurses and lower-level health professionals, such as occupational and speech therapists, who blow the whistle. These fields are still

dominated by women. It may well be that large numbers of women have been blowing the whistle for a long time, but nobody has noticed because these are not exciting cases. In other words, more women than men may have been blowing the whistle for a long time, and no one bothered to look. (Alford, 2003: 69)

As Harrison notes, this invisibility can work to one's advantage, because it allows many women to 'fly under the radar'; yet it is also a vulnerability, because it invisibilizes the injustices done to female-identifying truth-tellers:

there is a flipside to that in that there is some protection in visibility. Not to be too paranoid and I don't think this is going to happen tomorrow but say the US ordered an indictment and I was to be extradited, I would want there to be journalists at the hearing, and people trying to make sure it was done with due process. I think Renata [Avila]'s point is that there are a lot of whistleblowers that have been caught that people don't know about. That is something that we try to work on, to give them a public defence. (Abraham, 2018)

In what follows, we further examine how the gendering of truth-telling is shaped by the way infrastructures themselves are gendered in ways that go mostly unnoticed, insofar as invisibility is part and parcel of how infrastructures – and gender – are perceived across social life. It is this entanglement between gender and infrastructures, as we shall see, that demarcates truth-telling bodies through the figures of whistle-blowers, leakers and hackers.

Gendering infrastructures: Leaking, whistling, hacking

Practices of truth-telling, such as whistle-blowing or leaking, are premised on the rupture of infrastructures that contain information. As Zoë Sofia has shown in her essay on 'Container technologies' (2000), in addition to being associated with traditionally gendered labour, container infrastructures are metaphorically imagined and overdetermined as feminine – as passive holders of content, as opposed to active, masculine power tools imbued with agency. Container infrastructures thus often withdraw from users' awareness: they are taken for granted, they seep into the background. The labours that sustain container infrastructures are considered menial because they maintain rather than produce. They are designed not to be obtrusive; their presence is to be felt but not noticed. While structurally necessary, they are unacknowledged as a 'precondition of becoming' (*ibid.*: 188). Their role is to enable the visible action that attains awareness and attention. They only become visible when they crack, when they fail to perform. Hence, their visibility is bound to be negatively perceived.

According to Sofia, this gendering of container infrastructures is the result of an understanding of space as a passive, neutral receptacle devoid of agency, and of a

cultural bias towards technologies that are dynamic, noticeable, generative and capable of producing change. Protection, storage, enclosure, accumulation and continuity – functions historically ascribed to both women and container infrastructures – are thus culturally devalued. These gendered infrastructural imaginaries, we argue, inform the normative distinctions between whistle-blowers, leakers and hackers, conditioning who counts as a truth-teller and who is allowed to speak truth to power.

It is no surprise, then, that in normative distinctions the leak is perceived as a failure of containment, while the act of whistle-blowing appears to be an intentional and calculated disclosure of information, and hacking to be a spectacular, technologically savvy penetration into a closed-off system. Leaking is from the outset premised on the existence of information infrastructures that contain information without spilling it. From the drip to the cascade, the leak is usually framed as a malfunction in which pieces of information flow from secretive, closed containers into the public sphere, either little by little or as a massive spill. This cultural imaginary of the leak is evocative of the infrastructure that becomes visible when it fails, when it breaks down; hence the leak is perceived as a failure. This is consistent with the etymological trajectories of the terms. Grose's 1823 *Classical dictionary of the vulgar tongue* defines 'leaky' as 'apt to blab: one that cannot keep a secret is said to be leaky'. Indeed, as Ben Zimmer notes, in English, leaky blabbers/talkers from the late nineteenth century onwards were stereotypically women (Zimmer, 2010).

By contrast, the same dictionary defines the expression 'blow the gaff' as follows: 'a person having any secret in his possession, or knowledge of any thing injurious to another, when at last induced, from revenge or other motive, to tell it openly to the world and expose him publicly, is then said to have blown the gaff upon him'; likewise, 'blow the gab' ('gab' meaning mouth) was taken to mean 'to confess, or impeach a confederate' (Grose, 1785: 15). According to this definition, the person who was able to blow a whistle was an authoritative figure who had been given a position ensuring a lawful state of affairs.¹ This is why the phrase to 'blow the whistle on' is often related to the policeman's whistle. The leaker, in contrast, in her early conceptualization, never held any such authority; and her actions, in the term's early instantiations, did not possess any intentionality either. The leaker was rather someone who spilled a secret in an unintended fashion. This again raises the question of agency pointed out by Sofia (2000) in

1 Later, however, the term gained the predominantly negative connotation of a cowardly informant, being rehabilitated only in the 1970s, when Ralph Nader intentionally sought to give the word a new cultural trajectory at the Conference on Professional Responsibility (see Zimmer, 2013).

her reading of container technologies: 'leaky' women in the nineteenth-century sense were not leakers in the present-day sense, since 'leaking' was not endowed with agency at that time. Rather, a leak was something that happened inadvertently, sometimes even embarrassingly. Both qualified as lacks, women and infrastructures alike are discursively constructed to leak. As Elizabeth Grosz wonders:

Can it be that in the West... the female body has been constructed not only as lack... but with more complexity, as a leaking, uncontrollable, seeping liquid? My hypothesis is that women's corporeality is inscribed in a mode of seepage. (1994: 203)

A symptomatic example is offered by philosopher Sara Ahmed's reading of reactions to her resignation from Goldsmiths College in protest at the institution's failure to address sexual harassment as a structural problem. According to Ahmed's interpretation, after sharing her reasons for resigning from her post, she was positioned as the cause of damage. As she puts it:

I became a leaky pipe, drip, drip. Organizations will try and contain that damage. The response in other words is damage limitation. (Ahmed, 2017)

Carrying on the metaphor, Ahmed argues that her leaky behaviour was to be contained by 'institutional plumbers' who would fix the leak and 'mop up the mess'. In her analysis, the institution framed the leak as a failure in an otherwise perfectly functioning system. It is the leak that needs to be mended, not the system that needs to be structurally changed or transformed. The leak is just a glitch that needs to be repaired. The framing of Ahmed's gesture as a leaky one, rather than as whistle-blowing, obviously devalues her truth-telling act and consequently diminishes the gravity of sexual harassment as a structural problem, which is pushed into the background of both the institution and public awareness.

Contrary to the leak, which is defined by lack, blowing the whistle is understood as an intentional act that adds something. Whistling is a volitional signal, a surrogate for speech (Nöth, 1998: 287). While 'leaking' materializes the act of disclosing information as a loss (a failure to contain), the term 'whistle-blowing' frames the act as a contribution (sending a signal).² Moreover, whereas leaking is framed as something that happens inadvertently, whistling indicates the mastery of technique and the use of a tool, be it one's lips or a whistle, which – again according to Sofia (2000), drawing on Lewis Mumford – is to be contextualized

2 Nevertheless, even here gendered language is at play: the nickname Deep Throat, given to Mark Felt by *The Washington Post's* Howard Simon, was an allusion to the infamous porn movie with Linda Lovelace (see Shepard, 2008).

in an infrastructural imaginary of utensils that are socially constructed and perceived as masculine.³

The infrastructural imaginaries of skill, volition and tools implicit in the figure of the whistle-blower are reinforced with the figure of the public-interest hacker. If the social construction of container technologies renders them feminine and passive, hacking in turn is culturally codified as masculine. The very word 'hacking' points towards an act of aggression (to hack) as well as a tool (the hack). Hackers are akin to 'dynamic machines for penetrating secrets and unlocking resources' (Sofia, 2000: 198). This infrastructural imaginary of aggression and exploration is explicitly at play, for instance, in Galloway and Thacker's influential work on the politics of networks, where they note that networked information spaces have 'bugs and holes... which make them as vulnerable to penetration and change as would a social actor at the hands of more traditional political agitation' (Galloway and Thacker, 2010: 82). Indeed, Galloway and Thacker explicitly militarize the infrastructural imaginary of the network, drawing on Carl von Clausewitz's conception of the 'decisive point of vulnerability as points of military or revolutionary intervention in battle strategies' (*ibid.*: 64). Vulnerability here is understood as a weakness to be exploited. The multitude – the political concept to which Galloway and Thacker ascribe positive value, for instance in the figure of the swarm – is politically powerful precisely because 'it has no "front", no battle line, no central point of vulnerability' (*ibid.*: 66). In this imaginary, the hacker – as part of a swarm – emerges as a uniformly masculinized force, capable of penetrating points of vulnerability with the aim of domination. This understanding of vulnerability as weakness, as a 'soft spot' to be exploited in order to obtain military or political gain, is consistent with a gendered construction of infrastructure, whereby vulnerability is equated with the container technology that becomes visible when it cracks, when it 'fails' and gives away its presence. As we shall see, this notion of vulnerability as potential threat, or something to be exploited, is part and parcel of business models within platform capitalism (Srnicek, 2017). This notion of vulnerability, as we unfold in the next section, actually precludes an understanding of social vulnerabilities such as those related to gender and race, which these technologically vulnerable platforms potentially amplify.

It should be noted, however, that Sofia's essay 'Container technologies' does not essentialize or entrench these gendered assumptions about passivity and aggressivity: she does not equate containers with women and instruments with

3 As Cohoon and Aspray note, computational language is saturated with 'themes of aggression, hierarchy, and dominance', such as 'hacking, blue screen of death, brute force, killer app, and number crunching' (Cohoon and Aspray, 2006: 146).

men. Rather, she examines and challenges how infrastructures of containment are socially construed and perceived as feminine while instruments are understood as masculine. She challenges such binary codifications by pointing out that both women's and men's bodies comprise many natural 'container technologies' besides sex-specific organs, including 'skin, mouth, stomach, bladder, bowel, blood vessels, even the penis is an expandable container of sorts' (Sofia, 2000: 187). She also includes technologies, commenting on skyscrapers – 'so obviously phallic but from the inside "a womb with a view"' – and the computer, 'which is basically a storage technology for data, yet which has often been represented as a kind of flying vehicle, even before widespread networking allowed internet "surfing"' (*ibid.*: 188). Drawing on philosopher Luce Irigaray, she also notes that this equation of infrastructures with women's labour is due to 'man's failure to grow up and acknowledge indebtedness to the spatial/maternal environment and the labors of those who sustain this facilitating space' (*ibid.*: 189). This might be complemented by Ursula K. Le Guin's (1985) essay 'The carrier bag theory of fiction', which draws attention to how history has been written from the perspective of Man the Hunter, positing tools of prey, such as the spear and fire, as the first inventions. Le Guin counters that such tools or inventions would be pointless if there were no containers or carrier bags to carry home the prey. She therefore proposes that the first tool was a carrier bag for food rather than a weapon, thereby lending weight to container technologies and their attendant gendered imaginaries. This is consistent with Sofia's consideration of container technologies as a corrective to phallic biases in interpretations of technology, and as a way of moving beyond traditional Western notions of space as passive, feminine and unintelligent by acknowledging the productive and generative quality of space.

Sofia's complication of the binaries of technological infrastructures helps us nuance and challenge accounts of the digital infrastructural imaginaries of truth-telling, their heteropatriarchal assumptions and their implications for the organizational logic and politics of digital parrhesia, not least in relation to ideas about secrecy and disclosure. Feminist and queer perspectives on the infrastructural imaginaries of leaking, blowing, hacking and swarming emphasize this need to nuance accounts and concepts of whistle-blowing and leaking. As Lauren Wilcox notes, swarms entail 'a deeply ambiguous relationship between signifiers of masculinity and femininity' (Wilcox, 2017: 27). This ambiguity between signifiers is especially present in hacking circles: contemporary feminist interventions de-emphasize hacking as an aggressive act of intrusion and transgression, instead foregrounding critical feminist, crip and queer practices that can shed light on the organizational politics and 'deep-seated teleological assumptions' of mundane and/or invisible infrastructures (Fox and Rosner, 2016). This challenge to the masculine understanding of hacking echoes

Le Guin's carrier bag theory, which also wishes to reinstate devalued instruments and practices as important tools.

Within this context, Lilly Nguyen, Sophie Toupin and Shaowen Bardzell (a.k.a. SSL Nagbot) outline a feminist approach to what they term '(un)hacking and making', whereby 'making' is foregrounded to introduce other kinds of expertise, such as craft and care, into conversations about technology. While this duality between hacking and making potentially replicates the deep-seated binaries encoded within technologies, it sets out to 'present an intentional praxis of subversion such that feminist hacking/making comprises an explicit method for encounter and engagement with existing normative infrastructures' (SSL Nagbot, 2016). This praxis often involves performing an 'infrastructural inversion' (Bowker and Star, 1999: 34) by visibilizing existing infrastructures in order to expose and examine their inner workings. It is also intended to rectify women's invisibility in computational culture and the field of science, technology, engineering and mathematics more broadly.⁴ Within this context, hacking is reclaimed as a positive mode of engagement that challenges otherwise gendered and normalizing infrastructures through structural inversion – among other things precisely to support, rather than exploit, vulnerabilities such as eating disorders and disabilities, through the design of women-, queer- and trans-friendly spaces, or by addressing women-centred concerns (see for instance Black, 2016; Forlano, 2016). By introducing other kinds of expertise culturally ascribed to women, such as craft and care, into conversations about technology, these perspectives wish to challenge and displace 'gendered configurations of power within technoculture' (SSL Nagbot, 2016). Such interventions complicate the vocabularies and infrastructural imaginaries associated with hacking, offering instead a set of practices that can redirect hacking towards the introduction of alternative values such as inclusion, care and intimacy.

Yet, it is also clear that the ambiguity between masculine and feminine signifiers remains in place or at least difficult to overcome, and that it has attendant implications for the gendered imaginaries of truth-telling (the same ambivalence is echoed in questions about hacking and race; see Greene-Hayes and James, 2017). Buttressing the notion of hacking with the prefix '(un)' and the adjoined term 'making' ('hacking/making'), SSL Nagbot (2016) shows that complicating the binaries encoded in technology can also reinstate those binaries. Moreover, claiming hacking as a subversive practice also comes with difficult political

4 As Sherry Turkle, Donna Haraway and Ludy Wajcman have shown, each in her own distinctive manner, the under-representation of women in the field of technology stems from a much more pervasive problem of socio-technical construction, where both the material infrastructures of computing and their imaginaries are suffused with masculine ideals.

questions about agency and subject formation in light of the political economy of entrepreneurialism. As Lilly Irani (2015) has recently pointed out, the current wave of neoliberalization of the practice of hacking suggests the need for a cautious approach to reclaiming it as a subversive or critical practice. Irani argues, for instance, that hackathons represent not only a site of subversive engagement but also a mode of entrepreneurial subject formation aligned with neoliberal policies. Such entrepreneurial subject formation aligns and reproduces, rather than counters, the gendered imaginaries of truth-telling, as it emphasizes innovation and risk-taking, behaviours traditionally ascribed to masculine entrepreneurs that women are often expected to emulate (Bruni et al., 2004). Within this larger framework, the conditions for subversive hacking do not always overlap with the political concerns by which it was motivated in the first place (Irani, 2015). Irani draws her conclusions from her experiences in hackathons organized in India, but her points are worth bearing in mind when considering the infrastructural imaginaries of truth-telling. What becomes apparent is that even if one subverts heteropatriarchal matrices of control in truth-telling practices on one level, one may be ensnared in the very same matrices on another, as they intersect with other categories and social phenomena. Gendered encodings of technology intersect with political and economic regimes to shape the organizational spaces where truth-telling is articulated. In the following section, we further discuss how moving beyond binaries does not necessarily equate with the subversion of heteropatriarchal matrices of control aligned with economic regimes.

Leaky platforms: Breaching as a feature, not a bug

The recent whistle-blower-sparked information scandal concerning Cambridge Analytica's misuse of Facebook data for political purposes provides a useful example to flesh out these intersections between gendered imaginaries and economic regimes. The main public objection in debates about the scandal pertained to the ways in which user information leaked from Facebook's platform to third-party users. The method, disclosed by former Cambridge Analytica employee Christopher Wylie – or as *The Guardian* called him, the 'data war whistleblower' – and Brittany Kaiser, consisted in harvesting millions of Facebook profiles in the US and then using this information to create psychological and political profiles of potential voters during the US presidential elections that could help political campaigns to target ads based on psychological make-up (Cadwalladr, 2018). Since the disclosure, debates have raged not only about the moral deficiencies of companies such as Cambridge Analytica, but also about the terminologies used to describe information disclosures and the roles of the people involved in them. Adding to the debate outlined in the previous

section, the Cambridge Analytica scandal is further complicated by the fact that Wylie described himself in an interview with The Guardian's Carole Cadwalladr as the 'gay vegan who made Steve Bannon's psychological warfare mindfuck tool' (Cadwalladr, 2018). He further added that Bannon, former head of Donald Trump's presidential campaign and chief strategist, believed 'gay people were the key to success' (*ibid.*). Speaking of Rebekah Mercer, daughter of billionaire Cambridge Analytica backer Robert Mercer, Wylie said:

The gays. She loved the gays. So did Steve [Bannon]. (*ibid.*)

Wylie added:

He saw us as early adopters. He figured, if you can get the gays on board, everyone else will follow. (*ibid.*)

At the same time, Bannon is said to have secretly corresponded with representatives of an anti-LGBT hate group (Butterworth, 2018). Wylie's disclosures have been met with criticism from the queer tech community, which sees his act of whistle-blowing as an instrumental use of queer hacking counterculture to distance himself from the Cambridge Analytica tactics to which he contributed. As one queer media scholar put it 'Christopher Wylie does not get a pass because he's broody' and 'The queer subculture of hackers' (1995) has come full circle to support fascism. Homofascism has pink hair.' (Anonymized Facebook post, 19 March 2018).

Moreover, Wylie also repeatedly undermined the legitimacy and authority of Brittany Kaiser, the former business development director for Cambridge Analytica, who testified about her involvement in the work of Cambridge Analytica before the U.K. Parliament and in a private before the Mueller Investigation. In the documentary *The great hack* (2019) directed by Karim Amer and Jehane Noujaim, Wylie even states in a striking comment that 'she is not a whistleblower'.

Returning to SSL Nagbot's discussion, we can see how challenges to normative imaginaries of whistle-blowing, hacking and leaking take place within a set of political and economic conditions that can undermine and defuse subversive potential. While Wylie positions himself as a queer man and mobilizes the queer hacking subculture to distance himself from Cambridge Analytica, his disclosures rather show that the subversion of binary identities can be aligned with capitalist and patriarchal regimes. The fact is that the media never hesitated to label Wylie a whistle-blower, aligning him with the masculine volition of truth-telling, where queerness functioned not as a subversion of binaries but as a pink-washing of 'surveillance capitalism' (Zuboff, 2019). Here, the queering of the

binaries associated with whistle-blowing reveals how norms can be both challenged and reinstated by the same truth-speaking subject, and how queerness can be absorbed by capitalist patriarchy.

Another central point of contestation that taps into infrastructural imaginaries of parrhesiastic spaces is whether or not the Cambridge Analytica scandal was a case of data breach. Confronted with the allegations made by Wylie, Facebook immediately countered the discourse of 'data breach'. Paul Grewal, a vice president and deputy general counsel at Facebook, stated:

The claim that this is a data breach is completely false. Aleksandr Kogan requested and gained access to information from users who chose to sign up to his app, and everyone involved gave their consent. People knowingly provided their information, no systems were infiltrated, and no passwords or sensitive pieces of information were stolen or hacked. (Grewal, 2018)

In a *New York Times* op-ed written two days later, sociologist Zeynep Tufekci noted in response:

Mr. Grewal is right: This wasn't a breach in the *technical* sense. It is something even more troubling: an all-too-natural consequence of Facebook's business model, which involves having people go to the site for social interaction, only to be quietly subjected to an enormous level of surveillance. The results of that surveillance are used to fuel a sophisticated and opaque system for narrowly targeting advertisements and other wares to Facebook's users. (Tufekci, 2018)

Media scholars Wendy Chun and Sarah Friedland presaged this point of contestation a few years earlier in their article 'Habits of leaking: Of sluts and network cards' (2015), in which they noted that what was surprising about all the leaks occurring in the digital world was not their existence, but our surprise at them. Indeed, Chun and Friedland argued that new media are not simply about leaks: *they are leak*. Chun later unfolded this viewpoint in her book *Updating to remain the same*, where she added:

In terms of networks, leaks are not accidental; they are central. Without leaking information, there could be no initial connection. (Chun, 2016: 51)

Significantly, Chun's argument is not so much concerned with the material question of leaking and whether data security is or is not possible. Rather, she suggests that leaking is part of the (infra)structural business model of social media platforms. Leaking, in this scenario, is not indicative of a system failure, but rather is an endemic mode of connective infrastructuring in digital communication and organization: digital platforms would most likely not work were they not constantly leaking information – indeed, their connective power, and thus revenue, is premised on leakiness. As Chun and Friedland put it: 'New

media work by breaching, and thus paradoxically sustaining, the boundary between private and public' (Chun and Friedland, 2015: 4).

As such, these platforms counter the popular imagination of what an information container should be. In 'Container technologies', Sofia already suggested that 'not all containers are designed to be impermeable or like the jug capable of outpouring: some are for slow leakage, some for soaking up drips, others for what we hope will be permanent containing' (Sofia, 2000: 192). She further posited: 'An extended analysis of containers would have therefore to examine "incontinence" – various deliberate (as in a colander or coffee filter), catastrophic (like Chernobyl or the Titanic), or merely embarrassing (!) failures of containment' (*ibid.*). This fundamentally challenges the notion of infrastructure as something that only becomes visible when it fails. According to Chun, in order to function, networks must constantly leak. And yet this structural leakiness is not perceived as structural, because leaks continue to be socially framed as failures of containment that reinstate the gendered imaginaries of infrastructures.

By pointing out that leakiness is structural, we do not mean to diminish the misuse of personal data harvested by companies from social media platforms, or any other kind of data misuse, but rather to emphasize that leakiness has become an organizational and business model within platform capitalism. Our point here is not so much to say whether such information disclosures are deliberate or strategic, but rather that the platform itself is designed to allow information to leak at all times. Understanding networked media as essentially leaky infrastructures obviously has implications for how we conceptualize the organizational conditions of information and its political effects. That would entail conceptualizing the Cambridge Analytica case, for instance, not as an anomaly and an organizational breach, but as a structural business model in the platform economy that raises new questions about the societal role of social media platforms, how information control and visibility management are leveraged in the digital age, and the new role of data circulation in political electoral strategies (Flyverbom, 2016). If we keep perceiving information disclosures as anomalies, as infrastructural failures, we miss the ways in which the organization and management of information currently operate through leaking. In other words, the fact that leaks are diminished – because they are associated with gendered infrastructural imaginaries, e.g. with infrastructures that fail to contain – can blind us to their structuring power. Leaks are not the result of broken infrastructures; they are the very structure through which information and power circulate.

Furthermore, the leakiness of these platforms often renders certain subjects leakier than others. Indeed, such leaky platforms all too often reinforce normative perceptions of gendered and sexualized behaviour as equally leaky. Chun and Friedland (2015) note that one of the most visible and vicious consequences of the leakiness of these networked media has been the phenomenon of slut-shaming: the release and public circulation of photographs and videos of women, especially young white women, engaged in consensual and non-consensual sexual acts. Most problematically, instances of slut-shaming often end up placing the blame on women's failure to contain themselves and their intimate sphere, to take responsibility for their own online actions ('don't be stupid enough to expose yourself online'), as if it were not an infrastructural condition that merely reinforces a structural vulnerability. As Chun and Friedland put it: 'Through slut-shaming, machinic and social habits [of leaking] are rewritten as individual habits of leaking' (Chun and Friedland, 2015: 8).⁵ These leaky networks thus reinforce the imaginary both of technologies and of gendered and sexual subjects that fail to contain:

These leaks indicate not only the desire for a privately sealed, protected Web 2.0 but also for a female sexuality and feminized online activity that is similarly sealed and contained. The online discourses that respond to the leak only entrench the sexist politics that suggest the inherently debilitating vulnerability of women. (*Ibid.*: 10)

This discussion of leaky habits, where the leaking platform disproportionately affects young women rendered as leaky online subjects, raises the question of vulnerability in fundamentally different terms than those invoked in traditional hacking circles, which frame vulnerability as a technological weakness to be exploited. Chun and Friedland emphasize that technological infrastructures premised on the continuous exchange of information ultimately reinforce structural vulnerabilities, subjecting the already vulnerable to new forms of vulnerability. Instead of arguing for a more private, contained internet, Chun and Friedland propose to rethink vulnerability as a way to disavow the gendered violence of the leak, and to fight for the right to be vulnerable, to be in public (both online and offline) and not be attacked (*ibid.*: 17).

This infrastructural imaginary matters, of course, for the organizational politics of information. But it also matters on a more fundamental level for how we envision information mediation, containment, responsibility and failure. The act

5 This overlapping of leaky platforms with leaky subjects has a predecessor in parallels between the AIDS discourse of the 1990s – when gay men or women were conceptualized as 'leaky bodies' lacking control over their bodily boundaries – and computers, which were 'represented as unable to police or protect their boundaries, rendering themselves vulnerable to penetration' (Lupton, 1995: 109).

of glossing over the essentially leaky nature of digital networks with an image of platforms as contained spaces serves to uphold not only platformed but also normative epistemological borders between the public and private spheres.

Only in this infrastructural imaginary of social media platforms can an event like Wylie's disclosure of Cambridge Analytica's use of social media data become an information scandal. In this infrastructural imaginary, the individual users – and the platforms – are still contained entities where leaking equals infrastructural failure. Yet, as queer theorist Eve Sedgwick showed in her landmark *Epistemology of the closet* (1990), this binary construct of 'secrecy/disclosure' holds its own normative distinctions formed by gendered and sexualized trajectories. At the heart of Sedgwick's work is a challenge to the 'secrecy/disclosure' binary, which she suggests is a social construct that has historically shaped contemporary queer subjectivities. Following Michel Foucault, she explores homosexuality as the backbone of modern ways of knowing: modern power is based on the knowledge of secrets, or as she puts it, modern power is organized around the figure of the closet. The closet here could be equated with a container technology: what it contains (what is closeted) and what it spills or leaks (the act of coming out) structure the modern organization of knowledge.

Queerness, then, rather than disrupting the social order, is constitutive of the ways of knowing that shape social life (*ibid.*: 52). It follows that Sedgwick altogether rejects the idea of information disclosure as 'truth-speaking', arguing instead that the impulse towards disclosure is an ideological trap that is already encoded into social order. Rather than 'the truth', what we get with disclosures is a spectacle, a ritualized convention that has little to do with any form of truth. To put it differently, instead of speaking truth to power, these disclosures (these moments of coming out) speak the truth of power. It is essentially how power operates.

Drawing on Sedgwick's epistemology of the closet, Chun proposes the term 'epistemology of outing' to describe this phenomenon of outing secrets that were never secrets to begin with. This epistemology, Chun suggests,

extends beyond – encompasses, bleeds into – other forms of exposure that are not obviously related to sexuality. To be clear, this is not to say that sexuality is irrelevant; it is rather to see the logic of the outing (inside/outside) as structuring communication more broadly... Most pointedly, the epistemology of outing depends on the illusion of privacy, which it must transgress. (Chun, 2016: 151)

The disclosures performed by Wylie, and their mediated effects in *The Guardian* and other media outlets, thus participate less in an act of truth-telling and more in a fundamental epistemology of outing, exposing what was already an open

secret rather than laying bare a truth that had hitherto been contained. It is therefore telling that Wylie sutured the disclosure of Cambridge Analytica's misuse of Facebook data to the disclosure of his own homosexuality ('whistle-blowing on himself', as one queer media theorist phrased it in a post on Facebook), laying bare the epistemology of outing at play in networked parrhesia. The Cambridge Analytica disclosure, like the many other disclosures that came before it, thus functions as a performative informational gesture that entrenches an epistemology currently built into information networks. An epistemology structured by gender and sexuality that ultimately demarcates truth-telling bodies and their attendant infrastructural imaginaries.

Conclusions

Every year seems to bring another spectacular leaky whistle-blowing and hacking scandal. With each scandal comes a wave of public outrage, and often a sentiment that finally the truth has been exposed, evil-doers outed, and the veil lifted so that the public can now see the truth for themselves. At the same time, however, these scandals are so recurrent that disclosures of information are steadily becoming habitual in contemporary networked information landscapes. The proliferation of outlets for information disclosure, from WikiLeaks to GlobaLeaks, AfricaLeaks, MormonLeaks and The Intercept (the list could go on), attests to the normalization of disclosure worldwide. As this article suggests, the acts of truth-telling enabled by these digital parrhesiastic spaces are structured around a set of complex political and epistemological mechanisms and assumptions that raise questions not only about what is meant by truth, but also about how it is scaffolded infrastructurally by gendered and sexualized assumptions, and how these intersect with political and economic regimes.

This article has put forward three main arguments. Firstly, we have shown that truth-telling practices are entangled in gendered matrices of control that make possible some truth-telling subjects while foreclosing others. Drawing on feminist infrastructure studies, we have shown how gendered and sexualized imaginaries overdetermine what counts as truth and who counts as a truth-teller. We have argued that truth-tellers can indeed be ignored and even made impossible, assigned instead to other, less morally revered or dignified infrastructural imaginaries such as tattling or assisting.

Secondly, we have shown how these matrices of control are underpinned not only by human relations but also by the socio-technical imaginaries that mediate truth-telling practices. We have argued that the gendered imaginaries of truth-telling in particular inform normative distinctions between whistle-blowing,

leaking and hacking, whereby whistle-blowing and hacking are socially constructed and perceived as active gestures, while leaking is viewed as a passive failure of containment. We thus approach the familiar categories of whistle-blower, leaker and hacker not as ontological figures, but as infrastructural imaginaries embedded in socio-technical apparatuses that echo and amplify the gendered imaginaries of truth-telling. A leak is a gendered infrastructural imaginary of the passive female's failure to contain truths, while whistle-blowing and hacking are gendered imaginaries pertaining to active gestures of truth-telling through spectacle and transgression.

Yet, to complicate such binary distinctions, we have argued thirdly that while heteropatriarchal matrices of control are at work in truth-telling practices, the binary assumptions of these gendered infrastructural imaginaries can also be reinstated by queer subjectivities that purport to subvert such binaries. Thus, the leak can be made to signify not the breach but rather the entire networks through which truths are told. Indeed, as Chun (2016) notes, networks *are* leaks.

Through an analysis of the Cambridge Analytica case, we have argued that the leak is more than a system failure: it has been adopted as a business model by social media platforms, and thus has become an endemic mode of connective infrastructuring in digital communication and organization of information. These leaky platforms fundamentally counter the popular conception of what an information container should be. No longer a sealed-off containing infrastructure that holds information (and occasionally fails and leaks), these platforms operate through an infrastructure of information that must constantly leak in order to function properly. Yet, this constant leaking continues to go unnoticed, as leaking is still perceived as a failure and not a norm. Moreover, we have suggested that these leaky platforms reiterate gendered and sexualized behaviour, reinforcing structural vulnerabilities already in place, equating leaky platforms with leaky bodies. Finally, the article has demonstrated that these platforms are premised on an epistemology of outing that exposes what was never a secret to begin with, since on leaky platforms the secret, the closet or the container no longer hold. These acts of truth-telling, rather than laying bare a truth that has hitherto been contained, function as performative gestures that entrench an illusion of containment by which information networks no longer operate. These negotiations between invisible infrastructural work and visible, sometimes even spectacular effects show that gendered imaginaries structure the modern organization of knowledge, yielding substantial material and ethical effects.

What are the wider implications of these arguments, not only for truth-telling and organizations, but also for social life more broadly? Firstly, recognizing such gendered imaginaries is not only a matter of theoretical importance, but also a

practical question of security and justice for female-identifying truth-tellers. The foreclosing of female-identifying subjectivities as whistle-blowers and their consequent invisibilization make them much more vulnerable to legal injustice. Thus, as Harrison (Abraham, 2018) notes, despite being deprived of the normal rights in prison, despite being in solitary with no access to books or the meals she needs for her dietary requirements, Reality Winner 'didn't arrive in the world with videos on front pages of websites, as Snowden did' (*ibid.*). She 'was caught out by the journalists she went to' who 'fucked up and accidentally gave her away', and now 'she's in a terrible situation with nowhere near the media coverage [of others]' (*ibid.*). Sarah Harrison and her allies are trying to keep Winner's plight in the public domain, but also, on a more fundamental level, to alter the conditions for future female-identified truth-tellers.

In the wake of #MeToo, as many have pointed out, increasing attention is being paid to women blowing the whistle on sexual harassment and assault (Hickerson, 2018). However, the frequent devaluing and discrediting of such truth-telling gestures also has to do with strategic demarcations between public and private spheres that sorely need to be challenged. Often, claims of sexual misconduct are deemed dubious and flawed when measured against the testimony of more powerful (white/male/affluent) subjects; but they are also deemed minor, private matters and pitted against the much more relevant public sphere of business and politics. In a recent op-ed in *The New York Times*, Anita Hill analyses Brett Kavanaugh's confirmation proceedings. Almost thirty years after her own testimony against judge Clarence Thomas, Hill argues that the Kavanaugh proceedings – which ultimately dismissed Christine Blasey Ford's claim that she had been sexually assaulted by the young Kavanaugh – are another example of sexual misconduct being rendered unworthy of public interest and with no bearing on public life (Hill, 2018). The Kavanaugh proceedings have further shown how truth-telling gestures can be especially dangerous for women within new parrhesiastic spaces: Ford testified to being doxed on Twitter following her revelations, which forced her family to move several times. The intersection of truth-telling and networked technologies, as we have suggested, thus also raises new challenges that not only devalue certain truth-telling bodies but also expose them to new risks.

Another important question raised by the #MeToo movement is how networked technologies, while enabling new forms of truth-telling, can also entrench structural inequalities among female-identifying truth-tellers. As many have pointed out, black women's long-standing work on gender and racial justice was and continues to be obfuscated by the white celebrity feminism that seized the spotlight of #MeToo. Not only was the pioneering work of civil rights activists, from Working Women United to Black Lives Matter, left out of genealogies of

truth-telling, but even the hashtag #MeToo was repurposed from the name of a movement launched ten years earlier by black writer and activist Tarana Burke, while the actor Alyssa Milano was initially credited with starting the hashtag on Twitter (Purtill, 2017; White, 2017). In many ways, the collective mobilization around #MeToo is the result of the labour of women of colour who paved the way for the public recognition of sexual harassment and abuse in workplace cultures. Yet, the movement has been co-opted by debates that prioritize the experience of victims who are mostly white, wealthy, famous and privileged over those who are not. Black feminist legal theorist Kimberlé Crenshaw, who coined the term 'intersectionality' and assisted Anita Hill's legal team in 1991, has also pointed out that much more work needs to be done to highlight and fight the intersected impact of such experiences in the context of race and gender alike (Crenshaw, 2018). What we would like to add to this plea is that such intersectional interrogations also need to consider the infrastructural imaginaries of networked spaces and how they contribute to valuing and devaluing certain subjectivities and truths at the expense of others, as recent work on 'platform feminism' demonstrates (Singh, 2018).

If some advances have been accomplished as a consequence of the #MeToo movement, another question that needs to be raised and kept in mind is whether women will be taken seriously when they blow the whistle on matters other than sexual violence (Hickerson, 2018). We need to remain attentive to prevent other forms of gendered and essentialized truth-telling from taking shape, such as women being considered capable of denouncing sexual harassment and abuse, but not matters that are considered to be specialized (and thus masculinized) such as corporate fraud, human rights violations and state secrets.

A second implication that we draw, then, is that academics should act in solidarity with this endeavour by confronting, negotiating and complicating the gendered work and imaginaries of truth-telling. As this article shows, recent work within organization studies has begun to undo some of the gendered assumptions of parrhesia, and we argue that feminist media and infrastructure studies offer productive avenues for pursuing this confrontation. However, given the moral issues at stake, the new communication networks that are emerging, and the business models that underpin them, much more work is needed to effectively counter and uproot the heteropatriarchal matrices that control not only what can be said but also who can speak and how they may speak. Understanding networked media as fundamentally leaky infrastructures, as we suggest, holds important implications for how we conceptualize the organization of information, and consequently for how we conceive of and intervene in its changing and emerging political effects. Moreover, it opens up to a new ethics of communication which, instead of retreating into individualizing, purified and

weird notions of privacy, accepts the existentially vulnerable truth that we touch all the time (Chun, 2018). Indeed, with politics seeping into the background of infrastructures, in what may meaningfully be referred to as a form of 'infrapolitics' (Thylstrup, 2018), critique and dissent may have to take the form of infrastructural intervention. The politics of infrastructures thus require us to be attentive not only to the loud materializations of the political spectacle, but also to the low frequencies of infrastructures and their quiet yet no less resounding effects (Campt, 2017). Beyond truth-telling, what this means for organizations, and societies more broadly, is that infrastructures matter because they fundamentally determine whose knowledge and labour are valued, and which subjectivities, voices and bodies come to count in social and public life.

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